

CLAIMS

1. A telecommunications system having a packet-switching communications network, comprising:

- 5 at least a first subscriber connected to the packet-switching communications network; and  
a network element of a circuit-switching communications network connected to the packet-switching communications network using an interface unit;  
wherein first signaling information is transmitted between the network  
10 element and the first subscriber, the first signaling information corresponding to a signaling standard of a circuit-switching communications network.

2. A telecommunications system having a packet-switching communications network as claimed in claim 1, wherein the first signaling  
15 information corresponds to a DSS1 signaling protocol.

3. A telecommunications system having a packet-switching communications network as claimed in claim 1, wherein a portion of the first signaling information is converted into second signaling information using the  
20 interface unit and is transmitted as second signaling information between the interface unit and the first subscriber.

4. A telecommunications system having a packet-switching communications network as claimed in claim 3, wherein the second signaling  
25 information corresponds to an H.323/H.450 signaling protocol.

5. A telecommunications system having a packet-switching communications network as claimed in claim 3, wherein the second signaling information corresponds to a SIP signaling protocol.

6. A telecommunications system having a packet-switching communications network as claimed in claim 3, wherein the second signaling information is transmitted using signaling packets of the packet-switching communications network, and wherein the first signaling information is transmitted  
5 using a data area of the signaling packets which does not contain any second signaling information.

7. A telecommunications system having a packet-switching communications network as claimed in claim 3, wherein at least one service or  
10 feature which cannot be used by the second signaling information is made available for use to the first subscriber via the first signaling information.

8. A telecommunications system having a packet-switching communications network as claimed in claim 7, wherein the service or feature is at  
15 least one of call pick-up, call divert, call forwarding, call name display, subscriber cut-in, subscriber-dependent ringing, three-way conferencing, large-scale conferencing, holding, displaying of toll information, a closed user group, a private call number schedule, call number identification, automatic callback when busy, automatic callback when no reply, call barring, call waiting and call transfer.  
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9. A telecommunications system having a packet-switching communications network as claimed in claim 1, wherein the first signaling information is transmitted between the first subscriber and at least one second subscriber in accordance with a tunnel principle using the packet-switching  
25 communications network.

10. A telecommunications system having a packet-switching communications network as claimed in claim 1, wherein the interface unit converts the first signaling information of the network element into second signaling information, and further converts the second signaling information into the first  
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signaling information, the first signaling information signaling information of the circuits switching communications network which can be converted the second signaling information.

5        11. A telecommunications system having a packet-switching communications network as claimed in claim 1, wherein user data is transmitted using the network element when there is a connection between the first subscriber and at least one second subscriber.

10        12. A telecommunications system having a packet-switching communications network as claimed in claim 11, wherein the user data is transmitted directly between the first and second subscribers using the packet-switching communications network when there is a connection between the first subscriber and the at least one second subscriber of the packet-switching  
15        communications network.

13. A telecommunications system having a packet-switching communications network as claimed in claim 1, wherein the first subscriber in the network element assumes the functions of one of a main line and an extension.

20        14. A telecommunications system having a packet-switching communications network as claimed in claim 1, wherein a call number is assigned to the first subscriber in the network element, the first subscriber in the packet-switching communications network has a subscriber address, and wherein the  
25        assignment between the subscriber address and the call number is made using a control unit.

15. A telecommunications system having a packet-switching communications network as claimed in claim 1, wherein the first subscriber is

administered as a subscriber with one of an ISDN basic access and a broadband ISDN access in the network element.

16. A telecommunications system having a packet-switching  
5 communications network as claimed in claim 15, wherein the ISDN access is one of an ISDN access in point-to-point configuration and an ISDN access in point-to-multipoint configuration.

17. A telecommunications system having a packet-switching  
10 communications network as claimed in claim 1, wherein the packet-switching communications network is a data network which is based on an Internet protocol, and the first subscriber is an IP terminal.

18. A telecommunications system having a packet-switching  
15 communications network as claimed in claim 1, wherein the first subscriber sets up a voice connection to a second subscriber.

19. A method for operating a telecommunications system having a packet-switching communications network, the method comprising the steps of:  
20 connecting at least a first subscriber to the packet-switching communications network;  
connecting a network element of a circuit-switching communications network to the packet-switching communications network using an interface unit; and  
transmitting first signaling information between the network element and the first subscriber, the first signaling information corresponding to a signaling standard of the circuit-switching communications network.